

Comprehensive Plan

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Comprehensive Plan City of Greenwood, Indiana

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Introduction

This is the Comprehensive Land Use and Transportation Plan for the City of Greenwood and its environs.

The Plan represents a vision for the future. The Plan is articulated in this document through Goals, Objectives, and Policy Statements. The Plan is illustrated by the Official Map.

The Plan is based upon:

- Research of population, land use, and economic factors pertinent to the region and to the Greenwood vicinity;
- Community attitude survey conducted through local newspapers and by direct mail to a sample of households;
- Planning workshops conducted with public officials and citizens;
- Frequent discussions with members of the Planning Commission during official public meetings;
- Thorough reconnaissance of the area; and
- Professional experience and judgement.

The Plan, when used in conjunction with various administrative and legal tools, will provide for the effective management of new development and existing resources, which together comprise the community now and in the future.

The administrative and legal tools, for which the Plan provides a foundation, include:

- Zoning Ordinances which regulate development uses and densities on the land, and setbacks and heights of buildings;
- Subdivision Ordinances which control the division of land;
- Building Codes which provide construction specifications of residential and non-residential buildings;
- Capital Improvements Programs which set forth priorities and schedules for implementing major public improvements;
- And a variety of other special purpose plans for parks, airport, and other community facilities.

This document is supplemented by a series of companion documents, which are incorporated by reference:

- Community Attitude Assessment, 1987
- Goals and Objectives, 1987
- Population Study, 1988
- Economic Study, 1988

All of the above documents were prepared by Pflum, Klausmeier & Gehrum Consultants in cooperation with the Greenwood Plan commission and the staff of City.

This document is further supplemented by a series of companion documents, which are also incorporated by reference:

- Greenwood Park and Recreation Master Plan, 1986;
- Airport Master Plan, 1986, as recorded in the office of the Johnson County Recorder, Office book 059. Page 976;
- Official Annexation Policy – Common Council Resolution No. 86-2 as amended by Res. No. 88-5, and Board of Public Works and Safety Resolution 86-1 as amended by Res. No. 88-2;
- Land Use Inventory, 1987

Community Attitude Assessment

The development of a clear understanding of the issues deserving community attention was fundamental to the preparation of the Plan. Any form of plan, whether public or private, individual or collective, must be grounded in or emerge from a basic understanding of the relative values and desires of those for whom plans were prepared.

Purpose... "Planning for What?"

In this respect a survey was conducted with the purpose of suggesting goals for the community from which a viable plan could emerge and around which a consensus of community concern could coalesce.

The survey answered the question... "planning for what?", and accomplished several purposes:

- it provided a reasonable sample of opinion from local citizens regarding their appraisal of local conditions;
- it ascertained the relative strength of importance of community thought regarding various aspects;
- it provided a basis for structured discussion of the results for the formulation of goals and objectives.

Method

A general attitude survey was developed jointly by City officials and the Consultant. The survey sought to determine attitudes regarding a wide variety of topical local issues including:

- Local Public Services and Facilities
- Housing
- Land Use and Development
- Traffic and Transportation
- Economic Development
- Public Finance

The survey enabled respondents to indicate both the importance of various topics as well as their opinion of current performance. Survey forms also invited respondents to write comments.

Results

The responses to the survey were processed and presented in detail to the Planning Commission.^v

Issues which were ranked "very important" by more than 40% of the respondents included:

- storm water drainage
- sanitary sewer/sewerage treatment
- public water treatment/distribution
- law enforcement
- fire protection
- elementary/secondary schools
- preservation of residential neighborhoods
- environmental protection
- enforcement of zoning and subdivision regulations
- east-west traffic flow
- north-south traffic flow
- access to interstate highway
- attract new employers
- retain existing employers

The most important issues were judged to be those related to public health (water and sewer), public safety (police and fire protection), and elementary and secondary educations. About 70% of the respondents ranked those issues as very important.

Next in importance were issues relating to traffic and transportation, and the preservation of existing residential neighborhoods. These issues were very important to 50%-60% of the respondents.

More than 70% of the respondents favored neither local income taxes, sales taxes, nor motor vehicle taxes, as ways to fund needed improvements. More than 90% of the respondents indicated that developers should be charged fees for necessary improvements to roads, sewers and drainage.

The results of this survey were used along with other planning data, maps, and materials in a workshop to formulate planning goals and objectives.

Existing Conditions

A thorough inventory of existing conditions was conducted to provide a basis for the Comprehensive Land Use and Transportation Plan.

The inventory of existing conditions consisted of: a land use inventory, a housing condition survey, a review of drainage patterns, the mapping of flood prone areas, the mapping of soil types, and the mapping of sewer service areas.

Land Use Inventory

Every parcel of land in the community was classified in terms of its existing use, measured, and coded onto a series of maps on file in the Department of Planning and Zoning.

The following tabulation indicates that the planning area contains 17,837 acres, of which 11,166 acres (62.6%) is undeveloped. Medium and low-density residential development together encompassed nearly 22% of the planning area. Transportation facilities (rights-of-way) comprised 6% of the area. All other categories comprised lesser portions of the area.

Much of the undeveloped land is very accessible, highly visible, is provided with city services, and represents an important resource for the community. Public policy must ensure that these areas as they develop do not suffer from errors of the past.

Summary of Existing Land Usage

<u>Category of Use</u>	<u>Acres</u>	<u>% of Total</u>
Industrial	426	2.4%
Commercial	574	3.2%
Business	42	0.2%
Institutional	248	1.4%
Medium Density Residential	384	2.2%
Low Density Residential	3,496	19.6%
Parks & Open Areas	430	2.4%
Undeveloped	11,166	62.6%
Transportation	1,071	6.0%
Total	17,837	100.0%

Housing and Environmental Conditions

Each residence of the community was observed and evaluated in terms of its apparent structural and environmental condition. This data was coded, tabulated and mapped with the results summarized in Figure 1.

Structural conditions were rated from excellent (#1) to poor (#4) based upon observations regarding litter, clutter, and conditions of landscaping, fences, etc.

A composite score was calculated for subareas with the results displayed in Figure 1.

Housing and environmental conditions for the community in general appear to be very good to excellent. However, there are indications of deferred maintenance on many homes in some of the older neighborhoods of the city, which are reaching an age when reinvestment in them is necessary.

Such neighborhoods are fragile and are easily influenced by factors which can either encourage improvement or accelerate decline. Public policy should be to stabilize these neighborhoods and to promote reinvestment.

Drainage Patterns

The prominent drainage patterns of the Greenwood area are illustrated in Figure 2. These patterns offer physical and economical constraints to extensions of sewer systems, and hence to the extensiveness of development.

Note that much of the area north of Smith Valley Road drains to the northwest while south of the road it drains generally toward the southwest.

Sewer Service Area

The influence of the drainage patterns is prominent in Figure 3 where trunk line sanitary sewers and the sewer service areas are shown. The trunk line sewers connect by agreement with the Indianapolis system, which delivers the raw sewage to its plant for treatment and discharge into the White River.

Flood Plain Areas

The drainage patterns are also prominent in Figure 4, which illustrates areas subject to flooding. The topography is relatively flat resulting in broad flood areas along relatively minor streams.

These floodways not only affect the configuration of land development, but they also affect the cost and configuration of roadways. Note that every major roadway in the community crosses at least one floodway requiring a bridge to be constructed and maintained.

Rights-of-Way

The apparent right-of-way widths are shown for selected roadways on Figure 5. These roadways once were adequate to serve the then rural area. Now, these rights-of-way are insufficient for arterial and collector streets to serve a growing suburban community. Thus, requirements for the dedication of additional rights-of-way through the land development process is an essential power to be exercised by the Plan Commission.

Goals and Objectives

The Comprehensive Land Use and Transportation Plan is articulated by a set of goals, objectives and policy statements which in turn are illustrated by the Official Map.

The goals, objectives, and policy statements were prepared in consideration of: community research, community attitude survey, planning workshops, discussions with Planning Commission, reconnaissance of the area, and professional experience.

The goals and objectives are structured by topic and by geographic area as shown by Table 1 and Figure 6.

Topical Goals and Objectives

The topical goals on Table 1 include those for economic base, land use, housing transportation, open space and recreation, and community facilities. These goals are broad statements that recognize Greenwood as a quasi-independent growth center within the multi-county urban area.

Topical objectives are arranged in support of these goals and in consideration of the various district subareas which together comprise the Greenwood community.

Geographical Goals and Objectives

The Greenwood area has several distinct subareas each with its own characteristics and dynamics to which public planning policy must be sensitive. Together these subareas represent a quasi-independent growth center within the multi-county urban area.

Goals for each of these subareas are stated on Table 1 together with supporting objectives arranged by topic.

Civic Business District Goals and Objectives

The goal for the “central civic business district” is to preserve it as the focal point of the community. Within this area are government offices (excluding governmental support facilities), park and recreational facilities, schools and churches, library and bank, businesses and residences. The topical objectives all focus on the preservation and stabilization of this important part of the community.

Established City Goals and Objectives

The “established city” is the portion of Greenwood, which comprised the original town and predates the post World War II suburbanization. These older neighborhoods are fragile and are easily influenced by factors that can either encourage improvement or accelerate decline.

The goal for the “established city” is the maintenance and encouragement of long term neighborhood stability. The topical objectives for community facilities, open space and recreation, transportation, housing, land use, and economic base, are all supportive of the stabilization objective.

Developing City Goals and Objectives

The land use inventory revealed that more than 60% of the community is undeveloped. The “developing city” encompasses much of this undeveloped area as well as areas recently developed.

The goal for the “developing city” is to coordinate new development with the ability to extend public services. The topical objectives stress the discouragement of “spot” and “leapfrog” development, and the encouragement of large scale developments which because of their scale, can be well planned with on-site amenities that can be coordinated with utility, transportation, park, and other public infrastructure improvements.

Interstate Corridor Goals and Objectives

The I-65 interchange with Main Street marks the gateway to Greenwood and the entire Indianapolis region. The large tracts of undeveloped land on either side of I-65 near this interchange are highly visible and very accessible. As such, the I-65 corridor area represents a significant economic resource for the local community, the metropolitan area, and the State. It provides a gateway location for quality development of considerable magnitude.

The goal for the “interstate corridor” is to therefore encourage high quality mixed use development. The topical objectives are to achieve the highest standards of architecture, landscaping, lighting, signage, internal circulation, and infrastructure.

Areawide Goals and Objectives

The areawide goal is for the Greenwood area to be a quasi-independent growth center within the multi-county region. Topical objectives in support of this goal focus on intergovernmental cooperation, and strengthening the attributes, which make the Greenwood area a desirable suburban community in which to live and work.

Development Policies

(See Figure 6)

The previously discussed goals and objectives suggested the following operational policies with regard to future commercial, industrial and residential development and for thoroughfares and annexation:

Commercial Development

- Restrict future commercial development to major corridors and deny encroachment into established residential areas.
- Create a new zoning district to combine B-1 and certain C-1 uses for portions of Madison Avenue and Main Street.

Industrial Development

- Promote clean industrial developments in two limited areas: the northeast area near the airport and within the I-65 corridor; and in the southern area east of U.S. 31 between County Roads 700 N. and 800 N.
- Promote the northeast area for warehousing, distributing, assembling, and offices because of I-65 accessibility and visibility.
- Promote the southern area for businesses and industries that particularly require access to CONRAIL.

Residential Development

- Protect existing residential development from commercial and industrial encroachment.
- Encourage more variety in housing types and flexibility in development standards.
- Allow more land to be used for higher densities of development (cluster, zero-lot line, apartments, and condominiums).

Thoroughfares

- Coordinate thoroughfare classifications with Johnson county officials.
- Require rights-of-way to be dedicated as a part of the development process in accordance with the Official Thoroughfare Plan.
- Determine new sources of revenue, which can be dedicated for thoroughfares.

Annexation

- Annex all areas now served by Greenwood Sanitary Sewers.
- Annex all future areas served by Greenwood Sanitary Sewers.

The previously discussed goals and objectives also suggested the following policies for specific areas of the developing community.

Northwest Territory

This area has developed rapidly during the past twenty years with mostly single family houses and scattered apartment buildings.

- Restrict further development of this area to only residential uses, except for land adjacent to State Road 135 which may be used for commercial purposes.
- Restrict the expansion of existing non-residential uses in this area.
- Improve north-south accessibility.
- Create new parks and recreational facilities in conjunction with residential development projects.

Southwest Area

The northern edges of this area have been developed with residential communities.

- Restrict further development of this area to only residential uses except for selected areas along State Road 135.

South Central Area

The U.S. 31 corridor which forms the eastern edge of this area contains industrial, commercial and mobile home uses.

- Permit high-density multi-family development to occur in this area as a transition buffer to the U.S. 31 corridor.

Southeast Area

The Valle Vista planned unit development constitutes the basic core of this residential area.

- Restrict further commercial encroachment south of Main Street.
- Promote clean industrial and business development in the vicinity of U.S. 31 and CONRAIL.
- Permit high-density residential development to occur between Sheek Road and I-65.

Far East Area

Much of this area east of I-65 is undeveloped.

- Permit single family and fringe development to occur north of Main Street.
- Permit multifamily development to occur along the east side of I-65.

Transitional Area

This area is between the airport and residential areas to its west and south where new development must be compatible with both airport activities and established neighborhoods.

- Permit only light industrial, light warehousing, offices, distribution and showroom facilities which are well landscaped in park like settings with no outside storage or sales to serve as transitional uses between the airport and established neighborhoods.
- Provide landscaped buffers and open areas between established neighborhoods and transitional uses.

Population and Economic Trends and Forecasts

The following paragraphs summarize population and economic studies which were prepared as a part of the comprehensive planning process and which are separately published.^T

Introduction

Greenwood is a part of the Indianapolis Metropolitan Statistical Area comprised of eight central Indiana counties: Johnson, Marion, Hamilton, Hancock, Hendricks, Boone, Morgan, and Shelby. These eight counties have strong economic, social, and geographic relationships that warrant their consideration as a metropolitan Statistical Area (MSA).

Greenwood is also a part of the Indianapolis Regional Transportation and Development study (IRTADS) area which encompasses all of Marion County and portions of Johnson and Hamilton Counties containing Greenwood and Carmel respectively.

The social and economic relationships between Greenwood and the region are thus widely recognized and well established. Therefore, the discussions which follow present historic and future population trends within a regional context.

Brief History

The City of Greenwood Municipal Building is about eleven miles south of Monument Circle in Indianapolis. Greenwood was once a rural community connected to Indianapolis by U.S. 31, which was then routed along Madison Avenue. The population of the entire Johnson County was fairly stable between 1900 and 1940, growing by only 10% from 20,223 to 22,493.

Following World War II, the residential growth rate accelerated, has continued, and will continue. By 1950, the population of the County grew to 26,183. During the next decade suburbanization continued and the population of the County grew to 43,704 by 1960.

Meanwhile, a four-lane divided highway was constructed to serve U.S. 31 and the growing number of inter-city trips. The highway improved the accessibility to Indianapolis, further enhancing the desirability of Greenwood as a suburban residential community.

Between 1960 and 1970, Johnson county grew by 40% to 61,128 persons. Meanwhile I-65 was being constructed and commercial establishments began to multiply to serve the growing number of residents.

The completion of I-65 along the east edge of Greenwood and parallel to U.S. 31 further improved the accessibility and of Greenwood and diverted essentially all of the long distance inter-city trips from U.S. 31. Between 1970 and 1980, Johnson County increased another 26% to 77,290 persons.

Greenwood, meanwhile, has grown from 7,169 persons in 1960 to 19,327 persons in 1980; and according to a special census, 22,111 in 1984.

The past and expected population growth has created demands for all types of retail and service establishments, many of which may be found along U.S. 31. Some of these in and north of Greenwood include:

- Greenwood Park Mall, one of the largest such facilities in the State, with 1,240,000 square feet of leaseable space and parking for 6,500 autos;
- County Line Mall with 199,400 square feet of leaseable area and parking for 1,500 autos;
- Numerous other strip commercial centers such as Greenwood Place, Greenwood Point, and Greenwood Corners;
- Several high volume discount, grocery, hardware, appliance, department, clothing, and toy stores;
- A variety of auto, truck, and camper dealerships.

Also, because of a growing reservoir of workers and excellent accessibility, Greenwood is beginning to emerge as a desirable location for light industry, warehousing, and distribution.

Thus, Greenwood has evolved since World War II from a rural community to a commuter community reliant upon Indianapolis for jobs and commercial services, to a suburb and community where employment opportunities are growing in response to the availability of workers and transportation.

Population Trends and Forecasts

Johnson County and the MSA

Johnson County is located in the south-central portion of the eight county Indianapolis Metropolitan Statistical Area.

The Johnson County share of MSA population increased from 5.5% in 1970 to 6.6% in 1980. Johnson County's share will continue to increase at a more modest rate through 2010, relative to the region as a whole.

However, as Marion County regains shares due to revitalization efforts in the downtown and the infilling of suburban areas, it is expected that the Johnson County share of future regional growth will stabilize at about the 7% level.

Johnson County and Pleasant and White River Townships

Pleasant and White River townships, within which the Greenwood Planning Area is located, are located in the north-central and northwest portions of Johnson County.

The greater portion of the City of Greenwood is located in the northwestern part of Pleasant Township. In 1980, Pleasant Township contained over 33% of the total population of Johnson County and had accounted for 35% of the growth in the county between 1960 and 1980.

White River Township, located to the west of Pleasant Township, contains a small portion of the City, but has experienced increasingly higher growth. By 1980 White River Township represented about 26% of the population of Johnson County, having captured roughly 42% of total county growth between 1960 and 1980. Between 1970 and 1980, White River Township population increased by 9,787 compared to 5,422 for Pleasant Township.

The combined population of Pleasant and White River Townships, which was 60% of the county in 1980, is expected to account for 67% of the Johnson County total by 2010.

City of Greenwood and the Greenwood Planning Area

The population of the City of Greenwood tripled during the 25 years ending in 1985. This growth has occurred both through real increases and through annexation. In 1980, and in 1985, the city of Greenwood represented about 72% of the population contained within the currently defined limits of the Planning Area. Future expansion of the City through annexation may occur within the Planning Area. Therefore, independent projections of population growth for both the City and Planning Area are impractical since the future geographic extent of the City cannot be precisely defined.

The Planning Area of Greenwood encompasses the northern half of Pleasant Township and extends westward into the rapidly developing portion of White River Township. In 1980 approximately 71% of the population of Pleasant Township and 40% of White River Township were contained within the presently defined limits of the planning area. The estimated 26,849 population of the planning area in 1980 represented about 35% of the total population of Johnson County.

By 2010, the population of the Greenwood planning area is expected to be about 43,000. The percentage of this figure, which will be contained within the corporate limits of the City of Greenwood, will be dependent upon annexation policies. Both the City of Greenwood and the Planning Area, however, will continue to represent increasing shares of the combined township area and of Johnson County.

MSA and Greenwood Forecasts of Households

The number of households in the MSA or in Greenwood is a function of a variety of factors, including:

- The number of persons older than age 20 who form households;
- The housing supply and economic conditions;
- Individual decisions regarding marriage and divorce, childbearing.

The U.S. Bureau of Census reports that “there have been considerable shifts in the choices American Adults have made concerning family formation and dissolution, and these choices are clearly reflected in the changing composition of households and families”.¹

The U.S. Bureau of Census report continues:

“The number of married-couple households with children present (two-parent households) has declined since 1970, but the number of one-parent households has more than doubled.

“Although non-family households accounted for most of the net increase in households from 1975 to 1980, family households have been the major component of household increase since 1980.

“Most of the increase in the number of family households since 1980 has been attributable to families maintained by a man or woman with no spouse present, and a substantial majority of these “other families” were maintained by women.

“Compared with their counterparts in 1970, women maintaining families in 1982 were younger, more likely to be never married or divorced, and more likely to be Black or of Spanish origin.

“The size of the average household in 1982, 2.72 persons, was the smallest yet recorded, continuing the marked decline that has been underway since 1965.”

Similar observations can be made of the Greenwood area and Johnson County. From 25,345 in 1980, the number of Johnson County households can be expected to increase to 36,851 in 2010, an increase of about 45%. Households which will continue to grow faster than the remainder of the county, will increase by about 73% to 27,487 in 2010, but with slightly lower average persons per household, 2.53 in 2010 compared to 2.83 for the county overall. This smaller household size reflects the higher percentage of multifamily (apartment) and mobile home units within the two townships as compared to the remainder of the county.

Households in the Greenwood Planning Area, which contains the more rapidly developing portions of Pleasant and White River townships, can be expected to increase by about 78%, from 9,810 in 1980, to 17,488 in 2010. As discussed in previous paragraphs, the increases within the Planning Area are expected real growth, and were projected without attempted assignment relative to present or potential corporate limits of the City of Greenwood. The 17,488 households projected for the Planning Area in 2010 represent 64% of the 27,487 households in the combined township area.

Summary

Regional MSA population growth is expected to be moderate during the next 20 years in reflection of changing social/economic patterns and the age distribution population.

Household size (persons per household) is expected to continue to decline and will continue to fuel a demand for housing units.

Types of new housing units will be responsive to demands of non-traditional occupants; that is, more family units headed by a single adult, single adults living alone and childless adult couples.

As a result, the Greenwood planning area can expect at least a 34% increase in the number of housing units between 1990 and 2010 while population growth will be about 28%.

Implications for Planning

1. Demand for housing will outpace population growth.
2. Greater demand for housing by non-traditional households (single heads of households, single person households, childless couples, elderly).
3. Greater demand for jobs by a generally older population.
4. Greater demand for services by a generally older population.
5. Demand for schools will underpace population growth.
6. Demand for autos (and travel) will keep pace with population.
7. Demand for better quality of life will increase with income and leisure time.

Economic Characteristics

Greenwood has evolved since World War II from a rural community to a commuter community reliant upon Indianapolis for jobs and commercial services, to a suburban community where employment opportunities are growing in response to the availability of workers and transportation.

While the preceding paragraphs focused on people and housing demand, this section focuses on people, occupations, jobs, income, development trends, and their planning implications.

People and Occupations

The 1980 U.S. Census reported that 6.81% of all persons employed in the MSA lived in Johnson County, in roughly the same proportion as the population share of the County. However, the Johnson County residents were not evenly distributed among occupational groups. Johnson County contributes more than its share of persons working in the groups of: precision products and crafts; machine operator and assembly; and, transportation and material handling. Conversely, the County contributes less than its share of workers in the categories of: professional; administrative support, and clerical; and private health services.

People and Jobs

The 1980 U.S. Census reported that in 1980 there were more County residents who worked outside the County than within it. More than 70% of the workers drive to work alone and took more than 15 minutes to do so.

Traffic count statistics substantiate these Census statistics and indicate that during the peak morning and evening commuting hours, more than 1300 vehicles per hour get on or off of I-65 at the Main Street interchange.

People and Education

The 1980 U.S. Census reported that the population of Johnson County is at least as well educated as the population of the State, with the younger population groups having completed more years of school than the older groups. Totally, over 70% of the county's population have completed high school, at least.

People and Income

The 1980 U.S. Census reported that family income levels for Johnson County were about 10% higher than the State and 5% higher than for the MSA. The proportion of Johnson County families below the poverty level was substantially less than for the State and MSA even though more than 1,000 families were in the poverty category.

People and Housing

The 1980 U.S. Census reported that the number of housing units which are owner occupied was about 72% throughout the State. Throughout the MSA and in Greenwood, about 65% of the housing units are owner occupied while 35% are renter occupied. By contrast, about 89% of the housing units were owner occupied in the more rural/suburban Pleasant Township.

The statistics reflect the concentration of apartments and other forms of rental housing in Greenwood which in turn are reflected in the statistics for Pleasant Township.

Demographics, economic and life style trends indicate that apartments and other types of smaller units may continue to be a major component in meeting future housing demands.

The statistics also indicate that average housing costs are higher in the County, the Townships and the City than elsewhere in the MSA and State. Average income levels are also correspondingly higher.

Relationship Between Population and Employment

The relationships between population and employment are expressed in terms of participation rates. Economic studies conducted for the Indianapolis MSA indicated that in 1980, 76% of the working age persons participated in the labor force. During 1980, in Johnson County, 93% of working age males and 63% of working age females participated in the labor force. Overall 78% of the Johnson County working age persons participated in the labor force. By the year 2010, it is

expected that 84% of the working age persons will participate in the labor force.

The higher expected rate of employment participation is attributable in part to a higher rate of female participants and a greater number of part-time employment opportunities.

Thus, of the 65,000 working age persons expected to reside in Johnson County in 2010, about 54,000 will be employed (84% of 65,000). It is important, for planning purposes, to understand the likely locations and types of these employment opportunities.

Retail and Non-Retail Employment

Previously cited economic studies suggest that retail employment throughout the MSA will increase by 35,000, or about 47% between 1980 and 2005. During the same period, non-retail employment will increase by 136,000, or about 30%.

It is important to note that much of the non-retail employment growth within the region can readily be absorbed within locations that either exist now, or are in various stages of planning. Industrial parks, office parks, technology centers, distribution centers are to be found throughout the region in various stages of completion, mostly near interchanges along the northwest, north, and northeast segments of I-465. However, land availability is growing scarce and real estate prices are higher in those areas. In addition, the central business district of Indianapolis is expected to add more than seven million square feet of new office space by 2005.

Development Trends

Astute developers are becoming increasingly aware of the value created by quality design and construction of business and industrial parks. Alert decision-makers are increasingly aware that thoughtful creative design increases project marketability, enhances image, and builds economic value over the long term. Public and private values are inherent in good design. Good design includes site planning, architecture, landscape architecture, signage, lighting, and traffic operations.

As a result, developers nationwide and in the Indianapolis region, are responding to performance standards and participating in off-site improvements which enhance the amenities of their sites and make them more competitive in securing tenants.

Implications and Opportunities

The preceding paragraphs cited economic statistics and identified some national and regional development trends. Together, the statistics and trends suggest some implications and opportunities for Greenwood.

I-65 Corridor

The I-65 interchange with Main Street marks the gateway to Greenwood and the entire Indianapolis Region. Large tracts of undeveloped land near this interchange are highly visible and very accessible. The area represents a significant economic resource for the local community, the region, and the State.

U.S. 31 Corridor

A second area having economic development potential is east of U.S. 31 between County Roads 700 N and 800 N. This area is accessible both by U.S. 31 and by CONRAIL.

Within this area are existing industries and undeveloped tracts of various sizes. This area is ideal for businesses which do not require direct Interstate Highway visibility or accessibility but which may require rail service.

Civic Business District

The Civic Business District of Greenwood provides a focal point for governmental, recreational, institutional, financial, and civic activities. Retailing establishments in this area serve particular clientele and special customer markets and cannot be expected to compete with regional or neighborhood shopping centers.

The strength of this area is in the schools, churches, library, parks, bank, and governmental offices (excluding governmental support facilities). When combined, these institutions create the “critical mass” of civic attributes, which provide identity to Greenwood. They provide stability to the businesses that exist nearby.

As such, public policy must be clear and strong in support of the retention and expansion of these institutions in the Civic Business District whenever possible.

Airport Area

Around the airport, light industrial, light warehousing, offices, distribution and showroom facilities may be developed to buffer flight activities from established neighborhoods.

Conclusions

Because of a growing reservoir of workers and excellent accessibility, Greenwood has emerged as a desirable suburban community in which to locate new light industrial plants, warehouse and distribution facilities, and offices.

The challenges are: to manage these new demands so that high standards of development are achieved; and to maintain civic focal point with which the community can identify.

The Comprehensive Land Use Plan

The goals, objectives and development policies, which have been articulated in previous paragraphs and are illustrated in the Comprehensive Land Use Plan, Figure 7.

Residential Land Use

Previous paragraphs have indicated that nearly 18,000 dwelling units will be required in the Planning Area in the year 2010 to house a population of 43,000. This represents a demand for about 6,500 additional dwelling units over a 25-year period between 1985 and 2010.

The demand for various types of dwelling units will depend on a variety of economic, demographic and life style factors. Previous sections of this report have indicated trends in these factors which suggest that the number of persons in each household will be fewer and that the adults will comprise a larger portion of the total population than they do today. Therefore, the demand for smaller housing units may increase and be satisfied by the construction of cluster homes, condominiums, and apartments at medium-high and high densities. Meanwhile, single family homes at low and medium-low densities will continue to dominate the market, but to a lesser extent.

Table 2 describes various types of residential categories within the context of the Greenwood Zoning Ordinance, Second Edition, 1984. The various zoning classifications have been grouped into four average density categories ranging between 0.5 dwelling units per acre (DU/AC) to 10.0 DU/AC.

Next, Table 3 indicates a range of residential land demand estimates for various density mixture scenarios. First, it is expected that traditional single family homes on individual lots at low and medium low densities will together satisfy half of the housing demand.

Secondly, it is assumed that between ¼ and 1/3 of the housing demand will be met by multifamily housing at high density. The balance of demand will be met by cluster, duplex, zero-lot line and other types of housing constructed at medium-high density.

Translated into area, the demand for housing will be between 1,500 and 2,700 acres of land under the three scenarios depicted in Table 4.

Table 2 - Definitions of Residential Density Categories

<u>Zoning District</u>	<u>General Description</u>	<u>Density Category</u>	<u>Density (DU/AC)</u> <u>Range</u>	<u>Average</u>
SF	Single family homes on large lots without public utilities	Low	0.25-1.0	0.5
R1 & R2	Single family homes on subdivision lots with public utilities	Med-Low	2.5-3.5	3.0
R2A & Duplexes	Cluster, duplex, and zero lot line homes with public utilities	Med-High	3.5-7.0	5.0
R3 & R4	Multifamily apartment and condominium buildings with public utilities	High	8.0-20.0	10.0

Table 3 - Demand Estimates for Residential Land Within Greenwood Planning Area (1985-2010)

<u>Density Category</u>	<u>Density DU/AC</u>	<u>High Mix</u>			<u>Medium Mix</u>			<u>Low Mix</u>		
		<u>%</u>	<u>DU</u>	<u>AC</u>	<u>%</u>	<u>DU</u>	<u>AC</u>	<u>%</u>	<u>DU</u>	<u>AC</u>
Low	0.5	0	0	0	5%	325	650	10%	650	1,300
Med Low	3.0	50	3,250	1,100	45%	2,925	975	40%	2,600	875
Med High	5.0	15	975	200	20%	1,300	260	25%	1,625	325
High	10.0	35	2,275	225	30%	1,950	200	25%	1,625	165
Total		100%	6,500	1,525	100%	6,500	2,085	100%	6,500	2,665

Table 4 - Additional Residential Land Requirement Within Greenwood Planning Area (1985-2010)

<u>Density Category</u>	<u>Maximum Demand (AC)</u>	<u>Discretionary Amount (AC)</u>	<u>Total Planning Requirement (AC)</u>
Low	1,300	200	1,500
Med Low	1,100	500	1,600
Med High	325	325	650
High	325	225	450
Total	2,950	1,250	4,100

The actual mixture of densities will depend upon market conditions that have previously been discussed. The Comprehensive Plan should be flexible to adapt to changing market conditions and able to accommodate the maximum demand in any category.

Table 4 provides a listing of maximum residential land demand estimates together with discretionary amounts of land to provide flexibility and choice within the Planning Area.

Thus, a total of about 4,100 acres of land should be designated for new residential use by 2010. This represents double the amount of land currently being used for residential purposes.

Figure 7 illustrates the distribution of the acreage expected to be demanded by future residential development. The residential acres shown are consistent with the goals, objectives and development policies previously articulated.

Commercial Land Use

Commercial land use is shown by the Comprehensive Land Use Plan to be confined to: the U.S. 31 corridor; the State Road 135 corridor; the Madison Avenue corridor; the Main Street corridor; and the I-65 corridor. The confinement of commercialism to these established areas provides focus and eliminates further sprawl and “leapfrog” development.

The intersection of the Main Street and Madison Avenue corridors is the focal point of the civic business district. The retention of business, institutional, financial, recreational and governmental office activities within this area is essential to maintaining a civic focal point of identification for the community, not withstanding the need for governmental support facilities elsewhere in the community.

The I-65 corridor, because of its visibility, accessibility, and large tracts of undeveloped land, is an ideal area within which commercial activities can be an integral part of well planned major mixed use projects of the highest standards to serve the local community, the region, and travelers.

The State Road 135 corridor offers further commercial development opportunities to serve the growing population in the western portions of the community.

The U.S. 31 corridor anchored by Greenwood regional Mall on the north end, and the industrial area on the south end provides for an axis of commercial and business development to serve both community and regional needs.

Business Land Use

Business land use patterns are shown on the comprehensive Land Use Plan to provide transition or buffer areas between uses that might otherwise conflict.

In particular, business uses are specified in the I-65 corridor in conjunction with commercial and industrial activities, which together should be well-planned mixtures of the highest standards.

Industrial Land Use

Industrial development is confined by the Comprehensive Land Use Plan to two major areas.

The I-65 corridor in conjunction with the airport provides opportunities for both large and small industrial development, warehousing, and distribution projects. This area offers visibility and accessibility attributes not found in many other areas in the metropolitan region. As such, high standards of design are warranted and demanded.

The U.S. 31/CONRAIL Corridor in the southern portion of the community provides opportunities for businesses and industries, which may require both highway and rail accessibility.

These two major areas together provide large inventory of land, which represents a valuable resource for the further economic development of the community and the region.

Institutional Land Use

Churches, schools, hospitals, and governmental offices are examples of institutional land uses that are essential to any community.

A “critical mass” of such institutions exists within the Civic Business District of Greenwood within the established city. Together, these institutions create an impact, a sense of place and a destination. As such they provide stability to nearby businesses and residences.

The Comprehensive Land Use Plan and its underlying goals, objectives, and policies call for institutional cooperation and leadership to strengthen the Civic Business District as the focal point of the community.

These goals, objectives and policies should be considered in every governmental and institutional decision regarding location and relocation of facilities and investment and in projects.

Open and Public Space

The Greenwood Parks and Recreational Master Plan Update of 1985 is incorporated herein by reference.

The Plan was originally adopted by the Park Board for the period of 1985-89. The Plan, however, as modified herein, shall remain in effect as part of this Comprehensive Plan until or unless it is duly amended according to law.

In addition to the Plan therein, this Comprehensive Land Use Plan includes a linear park along the flood plain of Pleasant Creek to connect Northeast Park, the old City Park, Pool Park, and a northern expansion of Craig Park.

The linear park would contain a storm water detention and retention pond south of Northeast Park. Such a pond will regulate the flow of storm water downstream and reduce the requirements for roadway structures which cross over Pleasant Creek.

In addition the pond and linear park will create a recreational resource and an amenity to adjoining property, both developed and undeveloped.

The land use map (Figure 7) shows two new parks. Northwest Park, located west of the Fry Road Fire Station on the former Johnson Suburban Utility property, was acquired in 1985 and began development in 1987. Either park could be expanded in the future. Northwest Park, in particular, lends itself to either eastward or westward expansion along Pleasant Creek.

Thoroughfare Plan

The efficient and safe movement of people and goods is a basic goal for any transportation system. The growth of the Greenwood area and Johnson County has placed considerable strain on meeting this fundamental goal.

The development of a transportation system is a critical element in the management of urban growth and the overall economic well being of an area. The systemwide plan must be both physically and financially attainable and must be acceptable to Federal, State and local transportation agencies.

The Thoroughfare Plan for the Greenwood area, shown by Figure 8, is supportive of the Comprehensive Land Use Plan and its underlying goals, objectives, and policies.

The Thoroughfare Plan provides functional classification categories, minimum cross-section standards, and an overall system. Together, these elements provide the framework for the Comprehensive Land Use Plan, a basis for requiring right-of-dedication as a part of the development process, and a mechanism for intergovernmental cooperation in managing and improving the system.

Functional Classification

Streets and roads are classified on the Thoroughfare Plan according to the function they serve in the system.

- Freeway. The primary purpose of a Freeway is to safely serve long distance interstate and regional trips at high speeds. As such, access is limited to widely spaced interchanges, and local roads and streets are separated.
- Expressway. The primary purpose of an Expressway is to serve high volumes of intra-regional trips. As such, access is controlled and confined to intersections with non-local streets and major driveways.
- Arterial. The purpose of an Arterial street is similar to that of the Expressway but with less stringent access control. Right of widths of 120 feet are required.
- Primary. The purpose of the Primary street is to serve traffic within, through, into, and out of the community. As such, access to adjacent properties should be carefully controlled. Parking along the Primary should be prohibited except where additional and adequate widths are provided. The Primary system should have 100 feet of right-of-way to ultimately accommodate four lanes of roadway and ancillary lanes.
- Secondary. The primary purpose of the Secondary system is to serve trips within the community, linking the local and collector streets with the Primary streets. A secondary function is to provide service to adjacent properties. As such, parking along Secondary system should be prohibited except where additional and adequate width is provided. Right-of-way should be 80 feet wide.
- Collector. The Collector streets link the local streets with the Primary and Secondary streets and provide circulation within neighborhoods. Parking may be allowed on Collector streets to serve adjoining properties. Rights-of-way should be 70 feet wide.
- Local and Cul-de-sac. Local and Cul-de-sac streets have the primary purpose of serving adjoining properties. Right-of-way should be at least 50 feet wide.

Standards

The following tabulation provides the required right-of-way and pavement widths for the various classifications of streets.

<u>Classification</u>	<u>Required Right-of-Way Width</u>	<u>Required Pavement Width</u>
Freeway	*	*
Expressway	*	*
Arterial	120	*
Primary	100	*
Secondary	80	44
Collector	70	32
Local	50	28
Cul-de-sac	50	28

* Subject to traffic operational studies

System

The Thoroughfare Plan shown by Figure 8 provides for a system of facilities to serve the Comprehensive Land Use Plan and the travel demands of the community.

The Thoroughfare Plan builds upon a well-established grid system of roadways. Extensions, realignments and improvements of these roadways provide better continuity, greater accessibility and more flexibility to serve the expected travel demands. Features of the Thoroughfare Plan are discussed in the following paragraphs.

North-South Roadways

North-south roadways provide linkages to the metropolitan area of which Greenwood is a part. I-65 (Freeway), U.S. 31 (Expressway) and State Road 135 (Arterial) provide this linkage service. All three of these roadways are the responsibility of the State. The Thoroughfare Plan includes a new interchange with I-65 at County Line Road, and improvements to both U.S. 31 and SR 135.

Supplementing the previously mentioned roadways are Emmerson Avenue and Arlington Avenue, each of which are designated as Primary roadways because of the service they provide along the I-65 corridor.

Secondary roadways further enhance north-south travel and improve system continuity. Several new alignments and extensions are shown by the Thoroughfare Plan in the vicinity of the Airport, within the I-65 corridor, and along Honey Creek Road (CR 200 W).

East-West Roadways

East-West roadways provide for travel within the community and to the north-south roadways which provide linkage to the metropolitan area. Three Primary east-west roads are designated by the Thoroughfare Plan.

County Line Road is the northern boundary of the City and its planning area. It is designated a Primary because of its length, the service it provides to the Greenwood Regional Mall, and the potential interchange with I-65.

Smith Valley Road traverses the center of the planning area and is designated a Primary. It connects with Emerson Avenue and Main Street to provide access to I-65 and the I-65 development corridor. Development encroachments along this roadway have not yet precluded future improvements.

County Road 700 N and 750 N, with new connections, is designated a Primary because of the continuity it provides to either side of the County in crossing I-65 and in serving the southern industrial area.

Other east-west roadways are of lesser classification but of equal importance. Main Street between Emerson Avenue and SR 135 is designated a Secondary street. West of Emerson Avenue through and beyond its interchange with I-65 it is designated a Primary.

County Road 800 N with new extensions is designated a Secondary across the community in order to serve the development that is expected.

I-65 Corridor

Large scale mixed use developments of the highest standards are expected for the I-65 corridor area. A separately prepared report for the City^T sets forth standards for roadways and internal circulation systems to serve this development.

The Comprehensive Land Use Plan and The Thoroughfare Plan incorporate the concepts of that report by designating an internal system of circulation roadways within the I-65 corridor area in order to minimize the number of intersections with the surrounding Primary network.

The construction of circulation roadways within and between development projects in the I-65 corridor area is necessary to preserve the capacity and safety of the Primary roads and the I-65 interchange.

Conclusion

The Greenwood area has emerged as a desirable suburban community in which to live and work. The area has grown rapidly in recent decades and with reasonable certainty the pace of development can be expected to continue.

The challenge to the Greenwood community is to manage growth so that high standards of development are achieved and that a civic focal point is maintained with which the community can identify.

This Comprehensive Land Use Plan, its accompanying Thoroughfare Plan, and the underlying goals, objectives and policies set forth a vision for the future of the Greenwood community. But because it is visionary, it will most certainly be in error in some respects, for no vision of the future is accurate.

But the merit of planning lies not in the accuracy of its predictions, but rather in the rational for the goals, objectives and policies which provide a basis for public and private decision making.

As a vision, the Comprehensive Land Use Plan and its goals, objectives and policies need to be reexamined periodically and reaffirmed or revised as appropriate.

(Footnotes)

^v Community Attitude Assessment, prepared for the City of Greenwood Planning Commission as part of the Comprehensive Plan, by Pflum, Klausmeier & Gehrum Consultants, 1987.

^t Population Study, prepared for City of Greenwood Plan Commission by Pflum, Klausmeier & Gehrum Consultants, May 1988.

Economic Study, prepared for City of Greenwood Plan Commission by Pflum, Klausmeier & Gehrum Consultants, May 1988.

^t Household and Family Characteristics; U.S. Bureau of Census; 1983.

^t Traffic Impact Study, I-65 Corridor; prepared for the City of Greenwood Board of Works; by Pflum, Klausmeier & Gehrum Consultants; January 1988.

